

U.S. Patent Application No. 10/810,386  
Amendment After Non-Final Office Action  
Reply to Office Action dated April 17, 2008

**REMARKS/ARGUMENTS**

This is a reply to the Non-Final Office Action dated April 17, 2008.

**Status of Claims**

Claims 1-16 are currently pending in this application.

Claims 1-4 have been withdrawn.

Claims 5 and 6 are currently amended.

New claims 15 and 16 are currently added.

No claim is canceled.

**Support for Amendments and New Claims**

Claims 5 and 6 are amended based on support provided at page 3, lines 28-31 and page 4, lines 1-4, and elsewhere in the present application.

New claims 15 and 16 have support at page 5, lines 15-21, and elsewhere in the present application.

No new matter has been introduced by this amendment.

**Withdrawn Rejection**

The applicants acknowledge with appreciation the indication made at page 2 of the Office Action that the Affidavit under 37 C.F.R. filed January 3, 2008 is sufficient to overcome the previous rejection of claims 5-12 based upon the 35 U.S.C. §103(a) rejection with respect to the Kierulff reference.

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**Response to New Grounds of Rejection – 35 U.S.C. §103(a) Obviousness Rejection Based on Mater et al., Black et al. and Kelly et al.**

Claims 5-14 have been rejected as being obvious under 35 U.S.C. §103(a) over Mater et al. (WO 2003023108 referenced as U.S. Pat. Appln. Publ. No. 2004/0198125 A1) in view of Black et al. (U.S. Pat. No. 7,008,889) and Kelly et al. (U.S. Pat. Appln. Publ. No. 2002/0004348 A1). The applicants respectfully traverse.

**Black et al. Is A Disqualified Reference – Applicability of § 103(c) Safe Harbor Provisions**

The applicants point out that the newly cited and relied upon Black et al. reference (U.S. Pat. No. 7,008,889) is disqualified as a reference under 35 U.S.C. § 103(a) against any of the present claims under the provisions of 35 U.S.C. § 103(c).

The present application was filed as a non-provisional application on March 26, 2004 claiming benefit of priority under 35 U.S.C. §119(e) from applicants' provisional application no. 60/457,607 filed earlier on March 26, 2003. This priority claim was made in one of the acceptable formats, viz., via application data sheet (M.P.E.P. §201.11). The present claims are fully supported by the disclosure of the applicants' provisional application no. 60/457,607.

As shown by the covering page of Black et al. patent, it issued on March 7, 2006 and had an earlier U.S. application publication date of July 31, 2003, when it published as U.S. Pat. Application Publication No. 2003/0143912 A1.

The present application's earliest effective filing date of March 26, 2003 predates the July 31, 2003 application publication date of Black et al. Therefore, neither the published patent nor underlying published application of Black et al. reference can be applied under either 35 U.S.C. §102(b)/103(a) or §102(a)/103(a) against the present claims.

As Black et al. ostensibly is only potentially available as a reference applied against the present claims under 35 U.S.C. §102(e), (f), or (g)/103(a), Black et al. is subject to being disqualified under U.S.C. §103(c).

In accordance with 35 U.S.C. §103(c), applicants hereby state that the subject matter of the cited U.S. Pat. No. 7,008,889 and its corresponding U.S. Pat. Application Publication No. 2003/0143912 to Black et al., and the claimed invention, were, at the time the claimed invention was made, owned by the same person (entity) or subject to an obligation of assignment to the

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same person (entity), i.e., Polymer Group, Inc.

Therefore, pursuant to 35 U.S.C. §103(c), it is respectfully submitted that the Black et al. reference is disqualified as a reference applied under 35 U.S.C. §103(a) against the present invention.

According to the most recent Office Action (page 3), Mater et al. differs from the current application and does not teach a lyocell fiber and does not teach hydroentangling layers together. The Final Office Action indicated that Black et al. was relied upon in the rejection for teaching hydroentangling two layers of batt fibers (page 6). As shown above, Black et al. is disqualified under the provisions of 35 U.S.C. §103(c), and the remaining references to Mater et al. and Kelly et al. in the rejection differ from and fail to account for all the recitations of the current claims in this application. Therefore, in the absence of Black et al., the current claims are patentably distinguishable over the remaining references to Mater et al. and Kelly et al. that were cited in the rejection made under 35 U.S.C. §103(a).

**Other Facts and Evidence Showing Non-Obviousness of the Present Claims**

The present independent claims 5 and 6 have been amended to clarify that the lyocell and modacrylic fibers in each of the nonwoven first and second layers *form a char rather than melt when burned*.

Although not available as a reference under §103(a) against the present claims, Black et al. is evidence that lyocell has been used in combination with a fusible fiber, such as polyester fibers (e.g., col. 3, lines 5-6, 51-56; Examples 2-3). This evidence in the Black et al. reference would have taught one of ordinary skill to design away from the present invention where the lyocell is instead combined with a non-fusible fiber, viz., modacrylic fiber, which allows the lyocell to char instead of form a melt when exposed to flames or heat of flames. Thus, there would have been no reasonable expectation of success for substituting lyocell for cotton fiber in Mater et al., as suggested in the Final Office Action.

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The Examiner's remarks at pages 5-6 of the Final Office Action also indicate that the applicants' previous arguments regarding Mater et al. teaching away from the yellowing problem and that Kelly et al. does not concern fiber blends containing lyocell are considered non-persuasive to the Examiner.

Referencing paragraph [0014] thereof, the Examiner states that Mater et al. teaches blending of flame retardant fibers to overcome disadvantages of previous fibers such as hydroentangled nonwoven spunlace flame barriers containing significant amounts of p-aramid fibers that impart color. However, even for sake of argument only, to the extent Mater et al. provides a nonwoven flame barrier construction to possibly address the yellowing problem associated with significant amounts of p-aramid in particular, that "solution" would be a different composite nonwoven construction than that of the current claims. As acknowledged by the Examiner, Mater et al. fails to teach any use of lyocell. Therefore, even with arbitrary picking, choosing and combining from amongst the six (6) different categories of fibers disclosed by Mater et al., one of ordinary skill can not construct the present invention. The Final Office Action suggests a reasonable expectation of success in producing a "soft, non-yellowing yet flame retardant fabric" by somehow blending fibers taught by Mater et al., but that suggestion, even if valid for sake of argument, does not render obvious the flame-retardant nonwoven fabric recited in the present claims. Unlike Mater et al., the present invention provides a solution to the yellowing problem otherwise associated with para-amid fiber that uses a multi-layered fabric configuration that still includes para-amid fiber (in one layer), but also *lyocell* and modacrylic in two layers of the configuration inclusive of the one containing the para-amid fiber.

With respect to Kelly et al., the Final Office Action indicates that this reference is being relied upon as teaching that the method of hydroentangling and forming a three-dimensional fabric pattern with flame retardant fibers is known in the art. However, as pointed out in the applicants' previous response, the Kelly et al. reference discloses an entangled nonwoven fabric with thermal protective fibers comprising a *single* precursor web consisting of a blend of aramid fibers and melamine fibers that is hydroentangled to itself, and not to a separate nonwoven fabric layer. Kelly et al. therefore fails to teach, suggest or predict the success of hydroentangling separate discrete nonwoven fabric layers together, nor for multiple layers each including lyocell and modacrylic fibers instead of melamine.

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In view of the above, the relied upon Mater et al. and Kelly et al. references for this rejection, either individually or in the proposed combination, fail to teach or suggest every claimed recitation of either present independent claim 5 or 6. Further, as explained above, the Black et al. reference is evidence teaching persons of ordinary skill away from the present invention. Present claims 7-16 are patentable over the Mater et al. and Kelly et al. references for at least the same reasons as their parent claim.

Therefore, the present claims are not rendered *prima facie* obvious over these references.

In view of the above, reconsideration and withdrawal of this rejection is requested.

It is believed that this application is in condition for allowance, and notice of such is respectfully requested.

If the Examiner believes that a teleconference would be useful in expediting the prosecution of this application, then kindly contact the applicants' undersigned representative of record.

Respectfully submitted,

/Ramon R. Hoch/

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